

## Engineering Plastics



## TYNALENE 9000-BLACK

## GENERAL

Density	0.93 g/cm <sup>3</sup>	ISO 1183	DIN 53479
Water absorption in air 50% r.h.	0 %	ISO 62	DIN 53715
Absorption 23-C in water-saturation	0.02 %	ISO 62	DIN 53495
Food Compliance – Yes		FDA / BfR	
UV Stability - Yes			

## MECHANICAL PROPERTIES

Tensile Modulus of elasticity	700 N/mm <sup>2</sup>	ISO 527	DIN53455
Impact strength Charpy 7.5 J	no break	ISO R179	DIN53453
Notched impact strength Charpy	no break	ISO179/3C	DIN53453
Ball indentation hardness	34 N/mm <sup>2</sup>	ISO2039.1	DIN53456
Shore hardness (D)	D60	ISO2039.2	DIN53456
Coefficient of friction to steel [12]	0.1	ISO 8295	DIN 53375

## THERMAL PROPERTIES

Melting point	135 °C	ISO 3146	
Thermal conductivity	0.40 W/ (km)	ISO 22007.2	DIN 52612
Linear expansion coefficient 23-60°C	150 x 10 <sup>-6</sup> K <sup>-1</sup>	ISO 11359	DIN 53752
Operating temperature continuously [17]	80 °C		
Operating temperature short period-no load [18]	90 °C		
Minimum operating temperature [19]	-200 °C		
Flammability UL 94 (3-6 mm thickness)	HB		UL94
Oxygen index (LOI)	18 %	ISO4589	DIN 22117

## ELECTRICAL PROPERTIES

Dielectric constant at 1 MHz	3	ISO 250	DIN 53483
Dielectric strength	45 KV/mm	ISO 243	DIN 53481
Volume resistivity	10 <sup>12</sup> Ωcm	ISO 93	DIN 53482
Dissipation factor tan Δ at 1MHz	0.001	ISO 250	DIN 53483

## Characteristics:

- Extremely Light Weight & Tough
- Excellent Wear Resistance
- Good Chemical Resistance
- Low Co-efficient Of Friction
- Impact Proof
- UV Stability

## Applications:

- Flow Promotion Liners
- Wear Profiles
- Conveyor Components & Rollers
- Scrolls
- Skating Rink Surfaces

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